REMARKS

Claims 14, 16, 20-21 and 24-25 have been amended to correct minor typographical and grammatical errors. Claims 10-16, 18-21 and 23-25 remain for further consideration. No new matter has been added.

The objections and rejections shall be taken up in the order presented in the Official Action.

1-2. Claims 10-11 and 20 currently stand rejected under 35 U.S.C. §103 for allegedly being obvious in view of the combined subject matter disclosed in U.S. Patent 5,390,342 to Takayama (hereinafter "Takayama") and U.S. Patent 5,712,690 to Kim (hereinafter "Kim").

Claim 10

Claim 1 of the present invention recites *"[a] method for selecting one of several receivers of a diversity receiving system, comprising comparing the levels of control signals of the automatic gain control of the receivers, and selecting the receiver whose control signal has the lowest level."* (emphasis added, cl. 10). It is alleged in the Official Action that *"...Takayama teaches a method for selecting one of several receivers of a diversity receiving system and selecting a receiver who control signal has the lowest level (see col. 1, lines 16-20, col. 4, lines 61-65, and col. 6, lines 20-22)."* (Official Action, pg. 2). It is recognized that Takayama fails to disclose comparing the level of control signals of an automatic gain control of the receivers (see Official Action, pg. 2). It is then alleged that *"Kim teaches a uniquely associated receiver control signal indicative of the amount of gain applied by an associated*

radio receiver to create a uniquely associated receiver output signal (see col. 2, lines 46-54 and col. 5, lines 23-30)." (Official Action, pg. 3).

Kim discloses a broadcast state self diagnostic apparatus and method. The self diagnostic apparatus and method of Kim employs an automatic gain control signal to determine if the number of horizontal sync signals is correct. As shown in FIG. 1 of Kim, the AGC signal from the AGC Portion 5 and a horizontal sync signal from the Horizontal Sync Signal Detecting Portion 6 are input to the microcomputer 7, which performs the diagnostics. Notably, the AGC signal disclosed in Kim is never used as a control signal for the selection of a receiver, or even for selection of a signal to be output. A fair and proper reading of Kim simply reveals a diagnostic test that operates on a *single* input signal, to determine if the data within the input signal is valid. Kim as nothing to do with signal selection, in a radio system or otherwise.

The Official Action contends that it would have been obvious to a skilled person at the time of the present invention *"...to make Takayama adapt to include a uniquely associated receiver control signal indicative of the amount of gain applied by an associated radio receiver to create a uniquely associated receiver control signal because this would allow for receiver selection that would improve the broadcast state of received signals."* (Official Action, pg. 3). This contention is improper for several reasons.

First, neither Takayama nor Kim discloses the use of a automatic gain control signal to control the selection of radio receivers in a diversity receiving system. It is recognized that Takayama fails to disclose the use of automatic gain control signals for the purpose of signal selection. It is then alleged that *"Kim teaches a uniquely associated receiver control signal*

indicative of the amount of gain applied by an associated radio receiver to create a uniquely associated receiver output signal (see col. 2, lines 46-54 and col. 5, lines 23-30)" (Official Action, pg. 3). However, Kim simply employs the automatic gain control (AGC) signal for diagnostic purposes, and not for signal source selected. In fact, Kim has nothing to do with a diversity receiver system, or receiving signals from a plurality of receivers, or even signal selection in general. Kim simply receives a *single* input signal, and performs a diagnostic test on that signal, and if the signal is determined to be abnormal Kim outputs a signal indicating the detected abnormality. Therefore, neither Takayama nor Kim discloses signal selection using a control signal associated with the automatic gain control.

Second, even if Kim discloses the technical subject matter as alleged in the Official Action, Takayama and Kim can not be properly combined since Takayama teaches away from such a combination. Specifically, Takayama states:

> "On the other hand, when attention is drawn to the internal problem of the receiving system, there are instances where there may occur small differences in the power gain of the front ends of the two respective receiving systems. To compensate such an unevenness in the operating characteristic (amplification degree), it is conceivable to use a gain controller. However, using the gain controller at high frequency circuits such as a front end, etc. is not preferable in view of generation of noise." (emphasis added, col. 1, line 65 - col. 2, line 6).

Accordingly, the clear and unambiguous language of Takayama expressly teaches away from automatic gain control, and therefore of course teaches away from any system that utilizes information indicative of automatic gain control. As a result, a person of ordinary skill in the art would not have modified Takayama to include an AGC signal to control receiver selection in a diversity receiving system, since Takayama expressly states that the use of automatic gain control is not desirable.

Claim 20

Claim 20 recites a diversity receiver system that includes:

> a plurality of radio receivers that each provide a uniquely associated receiver output signal and a uniquely associated receiver control signal that is indicative of the amount of gain applied by said associated radio receiver to create said uniquely associated receiver output signal; and
>
> a selection mechanism that receives said receiver control signals, and determines which of said radio receivers has applied the smallest gain correction to its associated receiver output signal, and provides a diversity receiver output signal indicative of said receiver output signal associated with the receiver that applied the smallest gain correction. (emphasis added, cl. 20).

As set forth above, the combined teachings of Takayama and Kim neither discloses nor suggests a system that determines which of the receivers to select based upon a control signal indicative of the amount of *automatic gain correction* applied. In addition, Takayama even teaches away from such a system (see col. 1, col. 1, line 65 - col. 2, line 6). Hence, the combination of Takayama and Kim is incapable of rendering claim 20 obvious.

2. Claims 12-16 and 18-19 currently stand rejected under 35 U.S.C. §103 for allegedly being obvious in view of the combined subject matter disclosed in Takayama, Kim and U.S. Patent 5,777,693 to Kishigami et al (hereinafter "Kishigami").

Claims 12-15

It is respectfully submitted that the §103 rejection of claims 12-15 is moot, and these claims are allowable since they depend either directly or indirectly from independent claim 10, which is patentable for at least all the reasons set forth above.

Claim 16

Claim 16 recites a receiver selection system that provides an output signal selected from at least first and second radio receivers. The selection system recited in claim 16 includes:

> a comparator that receives a first control signal from one of the radio receivers and a second control signal from another of the radio receivers... ; and
> a switching element responsive to said selection signal, ... , wherein
> said first control signal is indicative of the amount of gain applied by first automatic gain control circuitry of said first radio receiver to create said first data signal, and said second control signal is indicative of the amount of gain applied by second automatic gain control circuitry of said second radio receiver to create said second data signal. (emphasis added, cl. 16).

As set forth above, there is no prior art reference, either alone or in combination, that discloses the use of automatic gain control for signal selection from a plurality of radio receivers. Kim simply teaches performing a diagnostic test on a single input signal to determine if data within the single input signal is valid.

In addition, a person working in the field of diversity radio receivers that select a receiver based upon a control signal indicative of the amount of automatic gain control would not look to Takayama since this reference teaches away from gain control. Specifically, Takayama discloses:

> "On the other hand, when attention is drawn to the internal problem of the receiving system, there are instances where there may occur small differences in the power gain of the front ends of the two respective receiving systems. To compensate such an unevenness in the operating characteristic (amplification degree), it is conceivable to use a gain controller. However, using the gain controller at high frequency circuits such as a front end, etc. is not preferable in view of generation of noise." (emphasis added, col. 1, line 65 - col. 2, line 6).

Hence, a fair and proper reading of Takayama reveals that it teaches away from gain control, and thus the claimed invention. Accordingly, it is respectfully submitted that claim 16 contains allowable subject matter.

Claims 18 and 19

It is respectfully that this rejection of claims 18 and 19 is moot, since independent claim 16 is patentable at least all the reasons set forth above.

3. Claims 21 and 23-25 currently stand rejected under 35 U.S.C. §103 for allegedly being obvious in view of the combined subject matter disclosed in Takayama, Kim, Kishigami and U.S. Patent 5,745,845 to Suenaga et al (hereinafter "Suenaga").

It is respectfully submitted that this rejection is now moot, since independent claim 20 is patentable for at least the reasons set forth above.

For all the foregoing reasons, reconsideration and allowance of claims 10-16 and 18-21 and 23-25 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,

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